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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,550

08/17/2005

Norimasa Ishii

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07/30/2007

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EXAMINER

FALASCO, LOUIS V

ART UNIT

PAPER NUMBER

1773

MAIL DATE

DELIVERY MODE

07/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/532,550

Applicant(s)

ISHII ET AL.

Examiner

Louis Falasco

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-15 is/are pending in the application.
- 4a) Of the above claim(s) 14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Papers Received

1. The Amendment and Remarks filed 06/25/07 are acknowledged.

Claims

2. The claims are: 1 to 3 and 5 to 15.

Election/Restriction of Invention

3. Claims 14 and 15 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention. Election was made **without** traverse in the reply filed on 12/27/06.

The claims under consideration are: 1 to 3 and 5 to 13.

Statutory Basis

Statutory Basis

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Rejections

4. Claims 1 to 3 and 5 to 13 are rejected under 35 U.S.C. 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Hironao et al** (JA 2002-032909) for reasons of record.
5. Claims 1 to 3 and 5 to 13 are rejected under 35 U.S.C. 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Saito et al** (US 2002/0127432 or 2003/0164005) for reasons of record.

Summarizing the reasons of record for the rejections, it was noted the prior art did not characterize bearing ratio and bearing heights for their substrates, however it was shown how the same materials and manufacturing processes in the prior art would have reasonably been expected to produce the same substrate or nearly so. The reasoning in applying **Hironao et al** and **Saito et al** was the same materials are in the article and the same parameters were employed in the method of manufacture would be expected to produce the same product or nearly so.

Response to arguments

Applicants' arguments filed 06/25/07 have been fully considered but they have not been found persuasive.

6. Applicants argue that although materials and manufacturing parameters have been shown in **Hironao et al** and **Saito et al**, (1) many factors go into producing the glass substrate for magnetic recording of the claims (2) many aspects in **Hironao et al** and **Saito et al** point away from the presently amended claim limitations.

(1) As regards numerous factors going into producing the glass substrate: a reasonable expectation of the same product had been established this has not been overcome by evidence¹. Additional aspects of the manufacturing method, including tape pressing load, abrasive grain size and rotations have been argued. However, these also appear to be within that of the prior art a glass substrates. The tape pressing load, abrasive grain size and rotations are within the same limits as disclosed *cf* instant specification pg 25 lns 1-4, page 30 lns 17-20, and Table 7 pages 43,44 – with **Sato et al** 2003/0164005 ¶[0050], [0090], **Saito et al** 2002/0127432 ¶[0057], [0069] and **Hironao et al** ¶[0020], [0032] [0054]. A reasonable *prima facie* case of obviousness has been established though bearing ratios and heights have not been measured in the prior art “... the characterization of a prior art material also does not make it novel.”²

¹ *Atlas Powder Co. v. Ireco Inc.*, 51 USPQ2d 1943, 1947; *In re Best*, 195 USPQ 430, 433

² *In re Crish* 73 USPQ2d 1364, 1368 and MPEP § 2112

(2) As regards **Hironao et al** and **Saito et al** surfacing characteristics pointing away from the presently amended claim limitations: a reasonable expectation of the same product had been established by prior encompassing the instant disclosed aspects or a failure to present evidence this would not have been in the prior art.

It is argued **Hironao et al** ridge heights (i.e., 3nm or less) and roughness maximum (i.e., 20-60 nm) teaches away from the claimed bearing ratios and heights and unlike the instant claims none of the **Hironao et al** ridges would be in a circumferential direction. However, applicants disclosed heights of 2nm - 5nm (specification page -3- line 13) are within that disclosed by **Hironao et al** and the instant disclosure is silent on a roughness maximum. Further **Hironao et al** does teach forming texture concentrically - see ¶s [0053-54], hence it would reasonably be expected that the texture would be concentric.

It is argued **Saito et al** ('432) Ra (0.5-1.0nm) and roughness maximum differ from the instant disclosed invention. However, applicants disclose the Ra as 0.35-1.0 nm (page-22 lines 14,15,25,26) within that taught by **Saito et al** ('432) and are silent as to the roughness maximum. It is also argued **Saito et al** ('432) has different width as evident from their 5,000 - 40,000 lines/mm line density, conversely this is within the instant 10-200 nm texture lines distance.

It is argued **Saito et al** ('005) measures atomic force microscope $5 \mu m^2$ area differing from the instant $10 \mu m^2$ Atomic Force Microscope area. This was also noted by the examiner in the previous Office action. Applicants have not shown how this lesser area for the microscope observation would result in a patentably different product.

Applicants conclude that **Hironao et al** and **Saito et al** fail because they do not address the bearing ratios and heights. However it has been established that **Hironao et al** and **Saito et al** have the same substrates materials, manufactured within the same parameters. Identifying or characterizing prior art properties does not make these properties novel. MPEP 2112 (I).

Secondary considerations

7. Applicants have, shown allowable subject matter in unclaimed bearing height ranges. Applicants have demonstrated an unobvious decrease in crashes for a limited range in examples 26-28. The probative value of which could reasonably be extended³ to the examples 25 to 29 with a BH(0.01)-BH(0.4) between .16 to .18 and BH(0.4)-BH(1.0) between .41-.45; no claim is commensurate in scope with this range.

³ *Grasselli*, 218 USPQ at 778

This unobviousness is evident particularly in Examples 26, 27 and 28 where no crashes in 24/48/ 72/96h intervals. The unexpected superior results in Examples 26, 27 and 28 may reasonably be extrapolated to Examples 25 through 29. It is also noted these examples do not use processes anticipated in the prior by any explicit prior art example.

Conclusion

The claims under consideration are 1 to 3 and 5 to 13.

- No claim has been allowed.

THIS ACTION IS MADE FINAL.

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1773

INQUIRES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis Falasco, PhD whose telephone number is (571)272-1507. The examiner can normally be reached on M-F 10:30 - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol D. Chaney, PhD can be reached at (571)272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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07/07



CAROL CHANEY
SUPERVISORY PATENT EXAMINER